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APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,693	06	5/27/2003	Seungug Koh		7725
26665	7590	02/03/2005		EXAMINER	
REVEO, IN 3 WESTCHE		SPECTOR, DAVID N			
ELMSFORD, NY 10523				ART UNIT	PAPER NUMBER
				2873	
				DATE MAILED: 02/03/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

			AK				
	Application No.	Applicant(s)					
	10/607,693	KOH ET AL.					
Office Action Summary	Examin r	Art Unit					
	David N. Spector	2873					
Th MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspond nc ac	idress				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timey within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered time the mailing date of this o D (35 U.S.C. § 133).	ly. ommunication.				
Status							
1) Responsive to communication(s) filed on 27 Ju	une 2003 and 26 November 2003	! .					
2a) This action is FINAL . 2b) ☑ This	action is non-final.						
3) Since this application is in condition for alloward	nce except for formal matters, pro	secution as to the	e merits is				
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-44 is/are pending in the application							
4a) Of the above claim(s) is/are withdraw	wn from consideration.						
5)⊠ Claim(s) <u>27-33</u> is/are allowed.							
6)⊠ Claim(s) <u>1-26,34 and 36-39</u> is/are rejected.							
7) Claim(s) <u>40-44</u> is/are objected to.)⊠ Claim(s) <u>40-44</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>27 June 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correct							
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form P	TO-152.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:)-(d) or (f).	•				
1. Certified copies of the priority document							
2. Certified copies of the priority documents have been received in Application No							
·	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
See the attached detailed Office action for a list	of the certified copies not receive	su.					
Attachment(s)							
1) Motice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948)	4)		•				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		Patent Application (PT	O-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, independent claim 8 is rendered indefinite (along with claims 9-19 which depend there from) by the use of the phrase "the selected fluid within the region" (Claim 8, Lines 2-3) therein. The aforesaid phrase is indefinite because there is no antecedent basis provided in claim 8 for said "fluid", or said "region". Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yao (U.S. Patent No. 5,978,125). In regard to independent claim 1, Yao discloses a variable optical delay (VOD) system comprising: a liquid crystal 42 optical switching subsystem for imparting a delay on an optical signal 20 (col. 6, In. 49-50; FIG. 5B, FIG. 8). Additionally, Yao discloses all of the features/limitations recited in claims 2-7 of the instant application (col. 10, In. 27-col. 11, In. 15). Claims 1-7 are therefore clearly anticipated by Yao.

Claims 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Yao (U.S. Patent No. 5,978,125). In regard to independent claim 20, Yao discloses a variable optical delay (VOD) system comprising: optical manifolds including polarization optical switches arranged in a folded

path to allow optical signal pass-through or delay, the delay being based on the folded path length (col. 4, In. 66-col. 5, In. 64; FIG. 3B). Additionally, Yao discloses all of the features/limitations recited in claims 21-26 of the instant application (col. 10, In. 27-col. 11, In. 15; FIG. 8, FIG. 9, FIG. 10A). Claims 21-26 are therefore clearly anticipated by Yao.

Claims 34 and 36-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Yao (U.S. Patent No. 5,978,125). In regard to independent claim 34, Yao discloses a variable optical delay (VOD) system comprising: a variable optical delay (VOD) system comprising: an optical switching subsystem 22|40 and an optical manifold subsystem 24 (col. 6, In. 49-50; FIG. 5B, FIG. 8). Additionally, Yao discloses all of the features/limitations recited in claims 36-39 of the instant application (col. 4, In. 66-col. 5, In. 64; col. 10, In. 27-col. 11, In. 15; FIG. 3B, FIG. 8). Claims 34 and 36-39 are therefore clearly anticipated by Yao.

Allowable Subject Matter

Claims 27-33 are allowable. The following is a statement of reasons for the is the recitation of indication of allowable subject matter: the index switching systems of independent claim 27 are distinguished by the inclusion of "regions capable of having at least two different fluids exchanged therein" in independent claim 27.

Claims 40-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the variable fluid refraction altering subsystem of claim 40 is distinguished by the inclusion of at least one micro-fluidic actuator therein.

Claims 8-19 could be made allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. The following is a statement of reasons for the of indication of allowable subject matter: the aforesaid claims appear to be directed to the particular subject matter disclosed in the instant specification (Page 10, Lines 16-21) wherein a variable optical delay is described that utilizes optical manifolds comprising regions capable of having at least two different fluids exchanged therein. In this case, (at least) claim 8 should be amended to reflect the aforesaid features/limitations.

Art Unit: 2873

Other Remarks/Information

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any other inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Spector whose telephone number is (571) 272-2338. The examiner can normally be reached at this number Monday through Friday between 6:00 AM and 2:30 PM. The fax number for the organization where this application is assigned is (703) 872-9306.

February 1, 2005

DAVID N. SPECTOR PRIMARY EXAMINER